

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

Draft

**AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Permittee Name: Equitable Production Company
Mailing Address: 748 North Lake Drive, Prestonsburg, KY 41653

Source Name: Kentucky Hydrocarbons, Inc.
Mailing Address: 72 Maple Street
Langley, KY 41645

Source Location: Same as Above

Permit ID: V-03-026 R1
Agency Interest : 38048
Activity ID: APE20070001
Review Type: Title V, Construction / Operating
Source ID: 21-071-00140

Regional Office: Hazard Regional Office
233 Birch Street, Suite 2
Hazard, KY 41701
(606) 435-6022

County: Floyd

Application
Complete Date: March 30, 2007
Issuance Date: February 4, 2004
Revision Date: April 16, 2007
Expiration Date: February 4, 2009

**John S. Lyons, Director
Division for Air Quality**

TABLE OF CONTENTS

SECTION	ISSUANCE	PAGE
A. PERMIT AUTHORIZATION	Revision #1	1
B. EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS	Revision #1	2
C. INSIGNIFICANT ACTIVITIES	Revision #1	24
D. SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS	Revision #1	25
E. SOURCE CONTROL EQUIPMENT REQUIREMENTS	Revision #1	26
F. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS	Revision #1	27
G. GENERAL PROVISIONS	Revision #1	30
H. ALTERNATE OPERATING SCENARIOS	Revision #1	36

	Permit type	Log or Activity#	Complete Date	Issuance Date	Summary of Action
V-03-026	Construction/Operating	38048	6/10/03	February 4, 2004	Construction/Operating Permit
V-03-026R1	Significant Revision	38048	3/30/2007	TBA	New NGL Plant

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SINGLE SOURCE DETERMINATION:

Kentucky Hydrocarbon, AFS # 21-071-00140 is operator of the entire plant and owner of EP-01 & EP-02, EP-03 (F01) and the adjacent extraction plant, Markwest Hydrocarbon, AFS # 21-071-00160 is owner of EP-03 (F02) & EP-04, that together are considered by the Kentucky Division for Air Quality to be a single “major source” as defined in 401 KAR 52:001, Section (1)(45)(b), definition of Major source for regulated air pollutants other than HAPS. Each owner/operator is responsible and liable for their own violations unless there is a joint cause for the violations.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

EP-01 (CE#1-CE#5) Five Compressor Engines

Description:

Model: Cooper-Bessemer (X-1) Compressor Engine.
Construction Date: 1957
Fuel Input: 5.1 mmBtu/hr, each.
Primary Fuel: Natural Gas (Only fuel used in this emission unit)
Controls: None

APPLICABLE REGULATIONS:

State Regulation 401 KAR 63:020, Potentially hazardous matter or toxic substances applies to toxic or hazardous air pollutants.

1. Operating Limitations:

None

2. Emission Limitations:

Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

Compliance Demonstration Method:

For compliance with 401 KAR 63:020, if the source alters any factor that would result in an increase of HAP emissions or the addition of HAP emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, along with air modeling to show that the facility will remain in compliance with 401 KAR 63:020. The source may perform a screening analysis of the potential to emit of formaldehyde and any other toxic pollutant emissions at the plant and compare it to established benchmarks (i.e. Reference Concentrations (RfCs), Unit Risk Estimates (UREs), as applicable).

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

Refer to Section F.

5. Specific Recordkeeping Requirements:

Refer to Section F.

6. Specific Reporting Requirements:

Refer to Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- EP-02A (H-501)** One existing 3.5 mmBtu/hr Molecular Sieve Regeneration Heater
Natural Gas Fuel only
Date of Construction: 1989
Control Device: None
- EP-02B (H2170)** One new 15.0 mmBtu/hr Molecular Sieve Regeneration Heater
Natural Gas Fuel only.
Date of Construction: Proposed in 2007.
Control Device: None.

These emission units include one 3.5 mmBtu/hr and one 15 mmBtu/hr natural gas fired regeneration heaters that will regenerate the molecular sieve beds by transferring the heat generated by combustion of natural gas fuel to the natural gas flowing through metal coils.

APPLICABLE REGULATIONS:

- ▲ *40 CFR 59:015, New Indirect Heat Exchangers*
- ▲ *401 KAR 60:005, 40 CFR Part 60 Standards of Performance for New Stationary Sources.*
- ▲ *40 CFR 60 Subpart Dc, New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units*

1. Operating Limitations:

None

2. Emission Limitations:

- a. Pursuant to 401 KAR 59:015 Section 4(1)(a), the particulate matter (PM) emissions from the regenerator heater (EP-02A) shall not exceed 0.56 lb/mmBtu.

Pursuant to 401 KAR 59:015 Section 4(1)(c), the particulate matter (PM) emissions from the regenerator heater (EP-02B) shall not exceed 0.48 lb/mmBtu.

- b. Pursuant to 401 KAR 59:015 Section 5(1)(a), the sulfur dioxide (SO₂) emissions from the regenerator heater (EP-02A) shall not exceed 3.0 lb/mmBtu.

Pursuant to 401 KAR 59:015 Section 5(1)(c)1., the sulfur dioxide (SO₂) emissions from the regenerator heater (EP-02B) shall not exceed 2.33 lb/mmBtu.

- c. Pursuant to 401 KAR 59:015 Section 4(2), the opacity of visible emissions from each regeneration heater shall not exceed 20%. A maximum of 40% opacity shall be permissible for not more than 6 consecutive minutes in any 60 consecutive minutes during cleaning the fire box or blowing soot.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

The permittee is in compliance with the PM, SO₂, and opacity limits at all times while burning only natural gas.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

None

5. Specific Recordkeeping Requirements:

None

6. Specific Reporting Requirements:

None

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

Date of Construction: Proposed in 2007
Control Device: None

Emission Unit Description

This emission unit includes a natural gas liquid (NGL) extraction system and associated equipment for the segregation of NGL components i.e., ethane, propane, butane, pentane, and other residual components. The main components of the NGL extraction system consist of dehydrators, chillers, turbo expander, compressor, deethanizer column, depropanizer column, and series of pipe systems. The equipment also includes fugitive components associated with inlet gas compressors and NGL product transfer and storage. All components of the NGL plant are closed units with no emissions to the atmosphere. Therefore, the only emissions will be from the fugitive components. The emission unit will consist of the following components:

Equipment Type	Number of Components	Construction Date
Flanges	1,965	2007
Valves	1,237	2007
Connectors	1,207	2007
Pressure Relief Valves	36	2007
Pump Seals	16	2007
Compressors	8	2007

APPLICABLE REGULATIONS:

- ▲ *40 CFR 60 Subpart KKK, New Source Performance Standards for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants.*
- ▲ *40 CFR 60 Subpart VV, New Source Performance Standards for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.*
- ▲ *401 KAR 60:005, 40 CFR Part 60 Standards of Performance for New Stationary Sources.*

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

NON-APPLICABLE REGULATIONS:

- ▲ 40 CFR 64, *Compliance Assurance Monitoring*.
- ▲ 40 CFR 60 Subpart Kb, *New Source Performance Standards for Volatile Organic Liquid Storage Vessels*.
- ▲ 40 CFR 60 Subpart HH, *National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities*.
- ▲ 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*.

1. Operating Limitations:

- a. Pursuant to 40 CFR 60.632(a) and 40 CFR 60.482-1(a), the permittee shall comply with all applicable requirements within 180 days after initial startup.
- b. Pursuant to 40 CFR 60.480(d), all fugitive equipment that are in vacuum service will be exempt from the requirements specified in this section of the permit if they are identified as required in Condition **5.h.viii**.
- c. Pursuant to 40 CFR 60.482-3(a) and (b), each **compressor** shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as specified in Conditions **1.h** and **1.i**. The seal system shall be:
 - i. Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
 - ii. Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to the flare.
 - iii. Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
- d. Pursuant to 40 CFR 60.482-3(c), the barrier fluid system associated with each **compressor** shall be in heavy liquid service or shall not be in VOC service. *In heavy liquid service* means that the piece of equipment is not in gas/vapor service or in light liquid service. *In light liquid service* means that the piece of equipment contains a liquid that meets all the following conditions:
 - i. The vapor pressure of one or more of the components is greater than 0.3 kPa at 20°C (1.2 in. H₂O at 68°F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference – refer to §60.17) shall be used to determine the vapor pressures.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- ii. The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 °F) is equal to or greater than 20 percent by weight.
- iii. The fluid is a liquid at operating conditions.

In gas/vapor service means that the piece of equipment contains process fluid that is in the gaseous state at operating conditions. *In VOC service* means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight. A determination for equipment in VOC service will be made by using procedures specified in Condition **3.d**.

- e. Pursuant to 40 CFR 60.482-3(d), the barrier fluid system associated with each **compressor** shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
- f. Pursuant to 40 CFR 60.482-3(e)(2), the permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the **compressor** seal system, the barrier fluid system, or both.
- g. Pursuant to 40 CFR 60.482-3(f), if the sensor indicates failure of the **compressor** seal system, the barrier system, or both based on the criterion determined in Condition **1.f**, a leak is detected.
- h. Pursuant to 40 CFR 60.482-3(h), a **compressor** is exempt from the requirements specified in **Conditions 1.c. through 1.g.**, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a flare. Refer to the **Compliance Demonstration Method** below.
- i. Pursuant to 40 CFR 60.482-3(i), a **compressor** is exempt from the requirements specified in **Conditions 1.c. through 1.h.**, if the compressor is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. The measurements must be taken using methods specified in Condition **3.b**. The test must be performed initially upon designation, annually thereafter, and at other time requested by the Division.
- j. Pursuant to 40 CFR 60.632(f), **reciprocating compressors** in wet gas service will be exempt from the compressor control requirements specified in **Conditions 1.c. through 1.i**. *In wet gas service* means that a piece of equipment contains or contacts the field gas before the extraction step in the process.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- k. Pursuant to 40 CFR 60.482-4(a), except during pressure releases, each **pressure relief valve** in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in Condition **3.b**.
- l. Pursuant to 40 CFR 60.482-4(b), after each pressure release, the **pressure relief valve** shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in Condition **8.a**. Refer to Condition **4.b**.
- m. Pursuant to 40 CFR 60.482-4(c), any **pressure relief valve** that is equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief valve to the flare is exempt from the requirements specified in Conditions **1.k**. and **1.l**.
- n. Pursuant to 40 CFR 60.633(b)(1), any **pressure relief valve** that is equipped with a rupture disk upstream of the valve is exempt from the requirements specified in Conditions **1.k**. and **1.l**. The permittee shall install a new rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Condition **8.a**.
- o. Pursuant to 40 CFR 60.633(a) and (b), the permittee may comply with the following operating limitations for each **pressure relief valve**, in lieu of limitations specified in Conditions **1.k**. through **1.n**.:
 - i. Each pressure relief valve will be monitored quarterly and within 5 days after each pressure release to detect leaks by the methods specified in Condition **3.a**.
 - ii. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - iii. Refer to Condition **1.ii**. for leak repair requirements.
- p. Pursuant to 40 CFR 60.480(d)(5), each **open-ended line** that is not in VOC service will be exempt from the requirements of Conditions **1.q**. through **1.u**. Refer to Condition **3.d**.
- q. Pursuant to 40 CFR 60.482-6(a), each **open-ended line** shall be equipped with a cap, blind flange, plug, or a second valve. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended line.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- r. Pursuant to 40 CFR 60.482-6(b), each **open-ended line** equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
- s. Pursuant to 40 CFR 60.482-6(c), when a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Condition **1.q.** at all other times.
- t. Pursuant to 40 CFR 60.482-6(d), **open-ended lines** in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements specified in Conditions **1.q.** through **1.s.**
- u. Pursuant to 40 CFR 60.482-6(d), **open-ended lines** containing materials which would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in Conditions **1.q.** through **1.s.** are exempt from these conditions.
- v. Pursuant to 40 CFR 60.482-7, each **valve** shall be monitored monthly to detect leaks by the methods specified in Condition **3.a.** If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- w. Pursuant to 40 CFR 60.482-7(c), any **valve** for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. Refer to Condition **1.ii.** for leak repair requirements.
- x. Pursuant to 40 CFR 60.482-7(e), first attempts at repair include, but are not limited to, the following best practices where practicable:
 - i. Tightening of bonnet bolts;
 - ii. Replacement of bonnet bolts;
 - iii. Tightening of packing gland nuts;
 - iv. Injection of lubricant into lubricated packing.
- y. Pursuant to 40 CFR 60.482-7(f), any **valve** that is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements specified in Condition **1.v.** if the valve:

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- i. Has no external actuating mechanism in contact with the process fluid,
 - ii. Is operated with emissions less than 500 ppm above background as determined by the method specified in Condition **3.b.**, and
 - iii. Is tested for compliance with Condition **1.y.ii.** initially upon designation, annually thereafter, and at other times requested by the Division.
- z. Pursuant to 40 CFR 60.482-7(g), any **valve** that is designated, as described in Condition **5.b.**, as an unsafe-to-monitor valve is exempt from the requirements specified in Condition **1.v.** if:
- i. The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Condition **1.v.**, and
 - ii. The permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.
- aa. Pursuant to 40 CFR 60.482-7(h), any **valve** that is designated, as described in Condition **5.b.**, as an difficult-to-monitor valve is exempt from the requirements specified in Condition **1.v.** if:
- i. The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
 - ii. The process unit within which the valve is located either becomes an affected facility through a modification or reconstruction or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and
 - iii. The permittee follows a written plan that requires monitoring of the valve at least once per calendar year.
- bb. Pursuant to 40 CFR 60.632, the permittee may elect to comply with the following alternative standards for **valves**, in lieu of complying with Conditions **1.v.**, **1.w.**, **1.y.**, **1.z.**, and **1.aa.**:
- i. The permittee shall comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- ii. If a valve leak is detected, it shall be repaired in accordance with the provisions specified in Conditions **1.x.** and **1.ii.**
- iii. Refer to Conditions **3.c.** and **6.a.** for compliance with alternative emission standards for valves.
- cc. Pursuant to 40 CFR 60.632, the permittee may elect to comply with the following alternative work practice standards for **valves**, in lieu of complying with Conditions **1.v., 1.w., and 1.y. through 1.bb.:**
 - i. The permittee shall comply initially with the requirements for valves, as described in Conditions **1.v., 1.w., and 1.y. through 1.bb.**
 - ii. After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip 1 of the quarterly leak detection periods for the valves.
 - iii. After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip 3 of the quarterly leak detection periods for the valves.
 - iv. If the percent of valves leaking is greater than 2.0, the permittee shall comply with the requirements as described in Conditions **1.v., 1.w., and 1.y. through 1.bb.** but can again elect to use the alternative work practice standards.
 - v. The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the alternative work practice standards.
 - vi. Refer to Conditions **5.d.** and **6.b.**
- dd. Pursuant to 40 CFR 60.482-8(a), if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at **connectors**, the permittee shall follow either one of the following procedures:
 - i. The permittee shall monitor the equipment within 5 days by the method specified in Condition **3.a.** and shall comply with the requirements of Conditions **1.bb.**
 - ii. The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- ee. Pursuant to 40 CFR 60.482-8(b), (c), and (d), if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. Refer to Condition **1.ii.** for leak repair requirements. Refer to Condition **1.x.** for first attempts at repair best practices.
- ff. Pursuant to 40 CFR 60.482-10(g), **closed vent system** leaks, as indicated by an instrument reading of 500 ppmv above background or by visual inspections, shall be repaired in accordance with leak repair provisions specified in Condition **1.ii.** Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.
- gg. Pursuant to 40 CFR 60.482-10(i) and (j), a **closed vent system** will be exempt from the inspection requirements specified in Condition **4.d.** in either of the following circumstances:
 - i. The closed vent system is operated under a vacuum; or
 - ii. Any parts of the closed vent system that are designated as unsafe to inspect will be exempt from the inspection requirements if they comply with the following: or
 - (a) The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of following the inspection procedures; and
 - (b) The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
 - iii. Any parts of the closed vent system that are designated as difficult to inspect will be exempt from the inspection requirements if they comply with the following:
 - (a) The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and
 - (b) The process unit within which the closed vent system is located becomes an affected facility through modification or reconstruction, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and
 - (c) The permittee has a written plan that requires inspection of the equipment at least once every 5 years.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- hh. Pursuant to 40 CFR 60.482-10(m), each **closed vent system** and the **flare** shall be operated at all times when emissions may be vented to them.
- iii. Pursuant to 40 CFR 60.482-3(g), 60.633(b), 60.482-7(c), 60.482-8(d), and 60.482-10(g), when a leak is detected for each compressor, pressure relief valve, valve, connector, or closed vent system, the leak shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition **8.a.** A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

Compliance Demonstration Method:

Refer to **3. Specific Testing Requirements**, **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements**

2. Emission Limitations:

None

3. Testing Requirements:

- a. Pursuant to 40 CFR 60.485(b), Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. Zero air (less than 10 ppm of hydrocarbon in air) and a mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane shall be used as calibration gases.
- b. Pursuant to 40 CFR 60.485(c), while determining compliance with the no detectable emission standard, methods specified in Condition **3.a.** shall be used to determine the presence of leaking sources. Method 21 shall also be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- c. Pursuant to 40 CFR 60.483-1(b)(2), if the permittee is complying with the allowable percentage of **valves** leaking standard specified in Condition **1.bb.**, the permittee shall conduct a performance test as follows initially upon designation, annually, and at other times requested by the Division:
 - i. All valves in gas/vapor service within the affected facility shall be monitored within 1 week by the methods specified in Condition **3.a.**
 - ii. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - iii. The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.
- d. Pursuant to 40 CFR 60.485(d) and 60.632(d), the permittee shall test each piece of equipment unless the permittee demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:
 - i. Pursuant to 40 CFR 60.632(f), each piece of equipment is presumed to be in VOC service or in wet gas service unless the permittee demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described in ASTM E169–63, 77, or 93, E168–67, 77, or 92, or E260–73, 91, or 96 (incorporated by reference as specified in 40 CFR 60.17) shall be used.
 - ii. Organic compounds that are considered by the Division to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.
 - iii. Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Division disagrees with the judgment, Conditions **3.d.i.** and **3.d.ii.** shall be used to resolve the disagreement.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

4. Specific Monitoring Requirements:

- a. Pursuant to 40 CFR 60.482-3(e)(1), each sensor associated with a **compressor** seal system, as specified in Condition **1.e.**, shall be checked daily or shall be equipped with an audible alarm.
- b. Pursuant to 40 CFR 60.482-4(b)(2), no later than 5 calendar days after the pressure release, the **pressure relief valve** shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in Condition **3.b.**
- c. Pursuant to 40 CFR 60.482-10(e), the permittee shall monitor the flare on a quarterly basis to ensure that it is operated and maintained in conformance with its design.
- d. Pursuant to 40 CFR 60.482-10(f), each **closed vent system** shall be inspected according to the following procedures and schedule:
 - i. If the closed vent system is constructed of hard-piping, the permittee shall comply with the following requirements:
 - (a) Conduct an initial inspection according to the procedures specified in Condition **3.a.**; and
 - (b) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
 - ii. If the closed vent system is constructed of ductwork, the permittee shall:
 - (a) Conduct an initial inspection according to the procedures specified in Condition **3.a.**; and
 - (b) Conduct annual inspections according to the procedures specified in Condition **3.a.**

5. Specific Recordkeeping Requirements:

- a. Pursuant to 40 CFR 60.635(b), the permittee shall keep following records for **pressure relief valves** that are subject to Condition **1.o.**:
 - i. When each leak is detected as specified in Condition **1.o.ii.**, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment. The identification on the pressure relief valve may be removed after it has been repaired.
 - ii. The following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- (a) The instrument and operator identification numbers and the equipment identification number.
 - (b) The date the leak was detected and the dates of each attempt to repair the leak.
 - (c) Repair methods applied in each attempt to repair the leak.
 - (d) "Above 10,000 ppm" if the maximum instrument reading measured by the methods specified in Condition **3.a.** after each repair attempt is 10,000 ppm or greater.
 - (e) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
 - (f) The signature of the responsible official whose decision it was that repair could not be affected without a process shutdown.
 - (g) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
 - (h) Dates of process unit shutdowns that occur while the equipment is unrepaired.
 - (i) The date of successful repair of the leak.
 - (j) A list of identification numbers for equipment that are designated for no detectable emissions as specified in Condition **1.k.** The designation of such equipment shall be signed by the responsible official.
- b. Pursuant to 40 CFR 60.486(f), the permittee shall keep following records for unsafe-to-monitor and difficult-to-monitor **valves** in a log that is kept in a readily accessible location:
 - i. A list of identification numbers for valves that are designated as unsafe-to-monitor, an explanation for each valve stating why the valve is unsafe-to-monitor, and the plan for monitoring each valve or pump.
 - ii. A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
- c. Pursuant to 40 CFR 60.482-10(l), the permittee shall keep following records for the **closed vent system**:
 - i. Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.
 - ii. Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- iii. For each inspection during which a leak is detected, a record of the information specified in Condition **5.f.**
- iv. For each inspection conducted in accordance with Condition **3.a.**, during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
- v. For each visual inspection conducted in accordance with Condition **4.d.i.(b)** during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
- d. Pursuant to 40 CFR 60.483-2(b)(6), while complying with the alternative work practice standards for **valves**, the permittee shall keep records of the percent of valves found leaking during each leak detection period.
- e. Pursuant to 40 CFR 60.632(e) and 60.486, when a leak is detected for **compressors, valves, and connectors**, the following requirements shall apply:
 - i. A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
 - ii. The identification on a valve may be removed after it has been monitored for 2 successive months as specified in Condition **1.w.** and no leak has been detected during those 2 months.
 - iii. The identification on equipment except on a valve, may be removed after it has been repaired.
- f. Pursuant to 40 CFR 60.632(e) and 60.486(c), when a leak is detected for **compressors, valves, and connectors**, the following records shall be kept for 2 years in a readily accessible location:
 - i. The instrument and operator identification numbers and the equipment identification number.
 - ii. The date the leak was detected and the dates of each attempt to repair the leak.
 - iii. Repair methods applied in each attempt to repair the leak.
 - iv. Specify "Above 10,000" for a leak if the maximum instrument reading measured by the EPA approved methods after each repair attempt is equal to or greater than 10,000 ppm.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- v. Specify "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- vi. The signature of the responsible official whose decision it was that repair could not be effected without a process shutdown.
- vii. The expected date of successful repair of the leak if a leak is not repaired within 15 days.
- viii. Dates of process unit shutdowns that occur while the equipment is unrepaired.
- ix. The date of successful repair of the leak.
- g. Pursuant to 40 CFR 60.486(d), the following information pertaining to the design requirements for **closed vent systems** and **flare** shall be recorded and kept in a readily accessible location:
 - i. Detailed schematics, design specifications, and piping and instrumentation diagrams.
 - ii. The dates and descriptions of any changes in the design specifications.
 - iii. A description of the parameter or parameters monitored, as required in Condition **4.c.**, to ensure that the flare is operated and maintained in conformance with its design and an explanation of why that parameter (or parameters) was selected for the monitoring.
 - iv. Periods when the closed vent systems and flare are not operated as designed, including periods when a flare pilot light does not have a flame.
 - v. Dates of startups and shutdowns of the closed vent systems and flare.
- h. Pursuant to 40 CFR 60.486(e), the following information pertaining to **compressors**, **pressure relief valves**, **valves**, and **connectors** shall be recorded in a log that is kept in a readily accessible location:
 - i. A list of identification numbers for all equipment;
 - ii. A list of identification numbers for compressors and valves that are designated for no detectable emissions, as specified in Conditions **1.i.** and **1.y.**
 - iii. The designation of compressors and valves as subject to the requirements specified in Conditions **1.i.** and **1.y.** shall be signed by the responsible official.
 - iv. A list of equipment identification numbers for pressure relief valves required to

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

comply with Conditions **1.k.** through **1.m.**

- v. The dates of each compliance test as required to comply with Conditions **1.i.**, **1.k.**, and **1.y.**
- vi. The background level measured during each compliance test.
- vii. The maximum instrument reading measured at the equipment during each compliance test.
- viii. A list of identification numbers for equipment in vacuum service.
- i. Pursuant to 40 CFR 60.486(f), the following information pertaining to all **valves**, designated as unsafe-to-monitor and difficult-to-monitor and subject to the requirements specified in Conditions **1.z.** and **1.aa.**, shall be recorded in a log that is kept in a readily accessible location:
 - i. A list of identification numbers for valves that are designated as unsafe-to-monitor, an explanation for each valve stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
 - ii. A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
- j. Pursuant to 40 CFR 60.486(g), the following information shall be recorded for **valves** complying with alternative standards for valves that are specified Condition **1.cc.**:
 - i. A schedule of monitoring.
 - ii. The percent of valves found leaking during each monitoring period.
- k. Pursuant to 40 CFR 60.486(h), the following information shall be recorded in a log for **compressors** and the information shall be kept in a readily accessible location:
 - i. Design criterion that indicates failure of the seal system and explanation of the design criterion; and
 - ii. Any changes to this criterion and the reasons for the changes.
- l. Pursuant to 40 CFR 60.486(j), the permittee shall keep records of the information and data used to demonstrate that a piece of equipment is not in VOC service in a log that is kept in a readily accessible location.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- m. Pursuant to 40 CFR 60.635(c), information and data used to demonstrate that any compressor that is in wet gas service to apply for the exemption specified in Condition **1.j.** shall be recorded in a log that is kept in a readily accessible location.

6. Specific Reporting Requirements:

- a. Pursuant to 40 CFR 60.483-1(b), if the permittee is complying with the allowable percentage of **valves** leaking standard specified in Condition **1.bb.**, the permittee must notify the Division that the permittee has elected to comply with the allowable percentage of valves leaking at least 90 days before implementing the standard.
- b. Pursuant to 40 CFR 60.483-2(a)(2), if the permittee is complying with the alternative work practice standards for **valves** (skip period leak detection and repair) specified in Condition **1.cc.**, the permittee must notify the Division at least 90 days before implementing the standard.
- c. Pursuant to 40 CFR 60.632(c) and 60.634, the permittee may apply to the Division for permission to use an alternative means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to that achieved by the controls required 40 CFR 60 Subpart KKK. The Division will consider applications for alternative means of emission limitation according to the following criteria:
 - i. The permittee must collect, verify and submit test data, covering a period of at least 12 months, necessary to support the finding that the alternative means of emissions limitation is equivalent to VOC reductions specified in the rule.
 - ii. The permittee shall commit in writing to operate and maintain the alternative means so as to achieve a reduction in VOC emissions at least equivalent to the reduction in VOC emissions achieved under the design, equipment, work practice or operational standard.
- d. Pursuant to 40 CFR 60.487(a) - (c) and 40 CFR 60.636(b), (c), the permittee shall submit semi-annual reports to the Division beginning six months after the initial startup date. All semiannual reports shall include the following information:
 - i. Process unit identification.
 - ii. For each month during the semiannual reporting period, the permittee shall record the following:
 - (a) Number of valves for which leaks were detected as described in Condition **1.v.**;
 - (b) Number of valves, compressors, and pressure relief valves for which leaks were not repaired as required by the leak repair provisions specified in Condition **1.ii.**;

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- (c) Number of compressors for which leaks were detected by sensor as specified in Condition **1.g.**;
 - (d) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; and
 - (e) Number of pressure relief valves for which leaks were detected as required in Condition **1.o.**
- iii. Dates of process unit shutdowns which occurred within the semiannual reporting period.
- iv. Revisions to items reported in the initial semi-annual report if changes have occurred since then or subsequent revisions to the initial report.

In addition to the above, the initial semiannual report shall also include the following information:

- i. Number of valves subject to the requirements specified in Conditions **1.w.**, **1.x.**, **1.z.**, and **1.aa.**
 - ii. Number of compressors subject to the requirements specified in Conditions **1.c.** through **1.f.**
 - iii. Number of pressure relief valves equipped with rupture discs upstream of the valve and subject to the requirements specified in Condition **1.n.** This will exclude the pressure relief valves designated for no detectable emissions subject to the requirements specified in Condition **1.k.** and those pressure relief valves equipped with a closed vent system and subject to the requirements specified in Condition **1.m.**
- e. Pursuant to 40 CFR 60.487(e), the permittee shall report the results of all performance tests. The performance test notification provisions of 40 CFR 60.8(d) will not apply to the equipment specified in this section of the permit except that the permittee must notify the Division of the schedule for the initial performance tests at least 30 days before the initial performance tests.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

- a. Pursuant to 40 CFR 60.482-9, delay of repair of equipment for which leaks have been detected will be allowed under following circumstances:
 - i. If repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP03 (F01) New NGL Extraction Plant Fugitives

- ii. Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service. Refer to Condition **3.d.** for the determination of equipment in VOC service.
- iii. Delay of repair for valves will be allowed if the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and when repair procedures are effected, the purged material is collected and destroyed or recovered in the flare.
- iv. Delay of repair for pumps will be allowed if repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
- v. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<u>Description</u>	<u>Generally Applicable Regulation</u>
1.	H-502- 0.5 mmBtu/hr Natural Gas Utility Heater, installed 1989	None
2.	D-FP- Diesel Fired Pump Engine for Periodic Testing, installed early 1970s	None
3.	D-AC-Diesel fired Air Compressor, used periodically (50 hours per year)	None
4.	CE#6,7- Two electric inlet gas Compressors with no emissions	None
5.	One pressurized natural gas liquid product storage tank (10,000 gallons), with no emissions.	None
6.	Two pressurized natural gas liquid product storage tanks (10,000 gallons each), with no emissions.	None
7.	Two pressurized natural gas liquid product storage tanks (30,000 gallons each), with no emissions.	None
8.	C-2400, C-2600, and C-4000- Three Electric Residue Gas Compressors, with no emissions.	None
9.	One Loading Rack, equipped with Vapor Recovery System, with negligible and unquantifiable emissions.	None

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Particulate matter and sulfur dioxide emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality
Hazard Regional Office
233 Birch Street, Suite 2.
Hazard, KY 41701.
(606) 435-6022

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in the permit and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points EP-02 (New Molecular Sieve Regeneration Heater) and EP-03 (F01) (New NGL Extraction process unit) in accordance with the terms and conditions of this permit.

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - (1) The date when construction commenced.
 - (2) The date of start-up of the affected facilities listed in this permit.
 - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.

SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

5. Testing Requirements

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission

SECTION G - GENERAL PROVISIONS (CONTINUED)

limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:

- (1) An emergency occurred and the permittee can identify the cause of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - (5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

SECTION H - ALTERNATE OPERATING SCENARIOS

N/A.